

AMENDMENT TO THE CLAIMS

1-30 (Cancelled)

31. (Currently Amended) A method for testing a memory device having a plurality of data lines, comprising:

latching data present on at least a subset of the plurality of data lines based upon an

enable signal, wherein at least two of said plurality of data lines ~~[[being]]~~ are

latched from two ~~[[corresponding]]~~ respective memory portions;

masking the latched data ~~[[associated with associated with]]~~ from said at least two of said plurality of data lines;

compressing the masked data to determine if the masked data matches a predetermined pattern using a compressing circuit; and

providing at least a pass signal if the masked data matches the predetermined pattern.

32. (Previously Amended) The method of claim 31, wherein compressing the masked data further comprises determining if each datum of the data matches a predetermined value.

33-37 (Cancelled)

38. (Currently Amended) An apparatus for testing a memory device having a plurality of data lines, comprising:

means for latching data present on at least a subset of the plurality of data lines based upon an enable signal, wherein at least two of said plurality of data lines [[being]] are latched from two [[corresponding]] respective memory portions;

means for masking the latched data [[associated with associated with]] from said at least two of said plurality of data lines;

means for compressing the masked data to determine if the data matches a predetermined pattern using a compressing circuit; and

means for providing at least a pass signal if the data matches the predetermined pattern.

39. (Previously Presented) The method of claim 31, further comprising:

providing a plurality of latches for latching the data associated with the subset;

providing a plurality of enable signals to the latches; and

disabling latches in the plurality of latches responsive to a deassertion of the associated enable signals.

40. (Previously Presented) The method of claim 39, wherein disabling the latches further comprises forcing the disabled latches to output a predetermined voltage.

41. (Previously Presented) The method of claim 40, wherein forcing the disabled latches to output the predetermined voltage further comprises forcing the disabled latches to output a voltage corresponding to a logic 1.

42. (Previously Presented) The method of claim 40, wherein forcing the disabled latches to output the predetermined voltage further comprises forcing the disabled latches to output a voltage corresponding to a logic 0.

43. (Previously Presented) The method of claim 39, further comprising:
receiving a latch signal; and
latching the data responsive to the latch signal being asserted in the latches with associated enable signals asserted.

44. (Previously Presented) The method of claim 43, further comprising bypassing the latch responsive to the latch signal being deasserted.

45. (Previously Presented) The method of claim 31, further comprising:
providing a plurality of latches for latching the data associated with the subset;
receiving a clock signal and a latch signal; and
latching the data based on a first combination of the latch signal and the clock signal.

46. (Previously Presented) The method of claim 31, wherein compressing the masked data further comprises performing a NAND Boolean function.

47. (Previously Presented) The method of claim 31, wherein compressing the masked data further comprises performing a NOR Boolean function.

48. (Previously Presented) The apparatus of claim 38, wherein the means for masking the latched data further comprises means for disabling the latching means responsive to deassertions of enable signals associated with the data lines in the subset.

49. (Previously Presented) The apparatus of claim 48, wherein the means for disabling further comprises means for forcing the disabled latches to output a predetermined voltage.

50. (Previously Presented) The apparatus of claim 49, wherein the predetermined voltage corresponds to a logic 1.

51. (Previously Presented) The apparatus of claim 49, wherein the predetermined voltage corresponds to a logic 0.

52. (Previously Presented) The apparatus of claim 38, further comprising means for bypassing the latching means responsive to a deassertion of a latch signal.

53. (Previously Presented) The apparatus of claim 38, wherein the means for compressing the masked data further comprises means for performing a NAND Boolean function.

54. (Previously Presented) The apparatus of claim 38, wherein the means for compressing the masked data further comprises means for performing a NOR Boolean function.